distribution throughout North America. In many cases additional notes are given that will help to distinguish the species from closely related entities. Twenty-six plates of detailed illustrations for all species included in the manual supplement the descriptions. The author is to be congratulated for making all drawings in a given series on the same scale. Four appendices cover species excluded, abbreviations and names of authors, meanings of specific names and a glossary. Although of interest, these appendices are not all essential. A useful bibliography of 193 titles completes the text. The manual gives evidence of much careful and painstaking work and is a welcome addition to the literature on Hepaticae. Since many of the species are widely distributed, the work will be of value to bryologists in other parts of North America.—Annetta Carter, Department of Botany, University of California, Berkeley.

Desert Wild Flowers. By Edmund C. Jaeger. Stanford University Press. Pp. 1-322, 764 figs. Stanford University Press, Stanford University, California. 1940. \$3.50.

Here is a book written for every nature lover who wishes to learn a good deal more about the plant life found on the Mohave and Colorado Deserts. Fewer and fewer people can resist the temptation to travel out into the arid wastes of the Southwest these days, and this volume is a fine introduction to the plant friends one will make there, whether he is going to Death Valley or the lower Colorado River. It is a scientifically accurate book written for the amateur and it is filled with interest for the widest audience.

Mr. Jaeger combines the varied training of a naturalist with the skill of a keen observer and the accuracy of a scientist. He has been a student of desert natural history for twenty-five years and himself first discovered in California several of the plants of which he tells. Furthermore, he knows how to present his story in a simple, colorful style. Consequently, this book not only describes the plants, but tells us a great deal about the animal life associated with them, as well as many details about habitats, economic uses, and life histories.

In addition to the latest scientific name, each plant has been given a common one chosen with meritorious care. Perhaps it is only the professional taxonomist who will regret the omission of the author of the scientific name. The concise descriptions are valuable aids to making the correct determinations, but they are intended only as supplements to the excellent line drawings that accompany each species. Mr. Jaeger himself was the artist and he travelled thousands of miles to sketch the plants in flower from life. The seven hundred and sixty-four line drawings and photographs serve as the only "key" to the book. One looks at the pictures, which follow the usual systematic sequence, until he matches his unknown plant. Then he verifies his determination by a peru-

sal of the careful descriptions. Since practically all the members of the flora of the California deserts have been included, this little handbook can properly lay claim to being the most complete work ever published on the flora of that region. Without doubt it is also the best. Its quality depends not only upon the careful work of its author, but upon the excellent handling given it by the publisher.—D. D. Keck.

## NOTES AND NEWS

Southern Occurrences of Allium crenulatum and Meconella oregana. Allium crenulatum Wiegand seems to have been recorded previously only from the Olympic Mountains in northwestern Washington. However, collections of this species with its flattened and characteristically crenulate scapes, have been made in northwestern Oregon as follows: rocky, exposed slope, Saddle Mountain, Clatsop County, June 15, 1936, John Ifft & S. G. Wildman 58; turf on open upper slope, Saddle Mountain, June 24, 1938, G. B. & R. P. Rossbach 518; loose turf on dry ledge, shoulder of Humbug Mountain (very near Saddle Mountain), June 25, 1938, G. B. & R. P. Rossbach 445. These collections are in Dudley Herbarium, Stanford University.

Meconella oregana Nutt. seems not to have been recorded south of Oregon. The following collections, at least, have been made in California: Fish Ranch road, Berkeley Hills, Contra Costa County, 1935, Adelyn Helsley 163 (Herb. Univ. Calif., Berkeley); moist flat, Mount Hamilton, eight miles from summit on road to San Antonio Valley, Santa Clara County, April 6, 1930, J. T. Howell 4662 (Herb., Calif. Acad. Sci.); moist soil, base of hillside along Arroyo Bayo, Dr. H. J. Beaver ranch, east side of Mount Hamilton, Santa Clara County, April 24, 1938, G. B. & R. P. Rossbach & H. J. Beaver 665 (Dudley Herb.).—George B. And Ruth P.

Rossbach, Stanford University.

Mr. Norman Nevills will lead an expedition of nine on a trip down the Green and Colorado rivers, leaving Green River, Wyoming, June 20, 1940, and arriving at Boulder Dam about August 25. The group will travel in three specially designed boats and will make botanical and geological observations and collections in the little known Canyon country. Dr. Hugh C. Cutler, of Washington University, is in charge of botanical research and Mr. Nevills of the geological work.

Mr. John Thomas Howell of the California Academy of Sciences, one of the readers of my article in the April, 1940, issue of Madroño, suspected that the species referred to therein as Carduus pycnocephalus was not that species but one closely allied to it. An exchange of material has permitted both of us to become satisfied that our introduced species is C. tenuiflorus Curt. I wish to express my sincere appreciation of the courtesy shown me by Mr. Howell in making possible the early correction of this error.—V. L. Corv.